

06-21-04

IFW



Attorney Docket No. 5405.301

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor: Newgard et al.
Application No.: 10/760,644
Filed: January 20, 2004
For: LACTATE DEHYDROGENASE AS A NOVEL TARGET AND
REAGENT FOR DIABETES THERAPY

Date: June 18, 2004

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

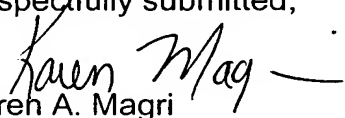
INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.97(b)

Sir:

Attached is a list of documents on Form PTO-1449, together with a copy of any listed foreign patent document and/or non-patent literature. A copy of any listed U.S. patent and/or U.S. patent application publication is not provided herewith in accordance with the waiver by the U.S. Patent and Trademark Office of requirements under 37 C.F.R. § 1.98(a)(2)(i) for all U.S. national patent applications filed after June 30, 2003 and for all international applications that have entered the national stage under 35 USC § 371 after June 30, 2003.

It is requested that these documents be considered by the Examiner and officially made of record in accordance with the provisions of 37 C.F.R. § 1.56 and Section 609 of the MPEP.

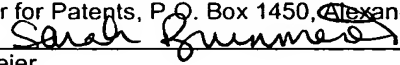
No fee is believed due. However, the Commissioner is hereby authorized to charge any deficiency or credit any overpayment to Deposit Account No. 50-0220.

Respectfully submitted,

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Sarah Brunmeier

FORM PTO-1449 U.S. Department of Commerce
Patent and Trademark Office

 Attorney Docket Number
 5405.303

 Serial No.
 10/760,732

LIST OF DOCUMENTS CITED BY APPLICANT

(Use several sheets if necessary)

A1 of A2



Applicants:

Christopher B. Newgard

 Filing Date:
 January 20, 2004

 Group:
 TBN

U. S. PATENT DOCUMENTS

Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
	1.	US-6,503,743		Ladunga, et al.			
	2.	US-5,744,327		Newgard			
	3.	US-6,194,176		Newgard, et al.			
	4.	US-5,747,325		Newgard			
	5.	US-5,792,656		Newgard			
	6.	US-5,811,266		Newgard			
	7.	US-5,427,940		Newgard			
	8.	US-5,993,799		Newgard			
	9.	US-6,087,129		Newgard, et al.			
	10.	US-6,110,707		Newgard, et al.			
	11.	US-6,429,006		Porro, et al.			
	12.	US-6,268,189		Skory			
	13.	US-6,057,141		Uchida, et al.			

i. FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Subclass	Translation Yes No
	14.	WO 97/26321		Newgard, et al.			
	15.	WO 97/26334		Newgard, et al.			

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	16.	AINSCOW, et al., "Acute overexpression of lactate dehydrogenase-A perturbs β -cell mitochondrial metabolism and insulin secretion," <i>Diabetes</i> 49: 1149-1155 (2000).
	17.	AKAI, et al., "Isolation and characterization of a cDNA and a pseudogene for mouse lactate dehydrogenase-A isozyme," <i>Int. J. of Biochem.</i> 17:5 645-648 (1985).
	18.	ALCAZAR, et al., "Importance of lactate dehydrogenase for the regulation of glycolytic flux and insulin secretion in insulin-producing cells," <i>Biochem. J.</i> 352: 373-380 (2000).
	19.	BERMAN et al., "Fundamental metabolic differences between hepatocytes and islet β -cells revealed by glucokinase overexpression," <i>Biochemistry</i> 37:13 4543-4552 (1998).
	20.	BROOKS et al., "Role of mitochondrial lactate dehydrogenase and lactate oxidation in the intracellular lactate shuttle," <i>Proc. Natl. Acad. Sci. USA</i> 96: 1129-1134 (1999).

EXAMINER

*EXAMINER

DATE CONSIDERED

Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant

FORM PTO-1449 U.S. Department of Commerce Patent and Trademark Office		Attorney Docket Number 5405.303	Serial No. 10/760,732
LIST OF DOCUMENTS CITED BY APPLICANT (Use several sheets if necessary) A1 of A2		Applicants: Christopher B. Newgard	
		Filing Date: January 20, 2004	Group: TBN
21.	FUKASAWA et al., "Complete nucleotide sequence of the mouse lactate dehydrogenase-A functional gene: comparison of the exon-intron organization of dehydrogenase genes," <i>Genetics</i> 116 : 99-105 (1987).		
22.	FUKASAWA et al., "Nucleotide sequence of the putative regulatory region of muse lactate dehydrogenase-A gene," <i>Biochem. J.</i> 235 : 435-439 (1986).		
23.	"Homo sapiens lactate dehydrogenase A LDHA, mRNA," Accession No. NM_005566; NCBI Database, 20 December 2003.		
24.	ISHIHARA et al., (Abstract) " Overexpression of monocarboxylate transporter and lactate dehydrogenase alters insulin secretory responses to pyruvate and lactate in β cells," <i>The Journal of Clinical Investigation</i> 104 : 1621-1629 (1999).		
25.	JENSEN et al., "A new model for fuel stimulated insulin secretion based on studies of adenovirus-mediated lactate dehydrognase overexpression in INS-1-derived cells," <i>Diabetes</i> 51 : A393 (2002).		
26.	JENSEN et al., "A novel mechanism for glucose-stimulated insulin secretion involving mitochondrial metabolism of lactate," <i>Keystone Symposia</i> January 21-26, 2003 (Abstract and Poster).		
27.	LI et al., "Protein structure and gene organization of mouse lactate dehydrogenase-A isozyme," <i>Eur. J. Biochem.</i> 149 : 215-225 (1985).		
28.	LU, et al., " ¹³ C NMR isotope analysis reveals a connection between pyruvate cycling and glucose-stimulated insulin secretion (GSIS)," <i>PNAS</i> 99 : 5 2708-2713 (March 2002).		
29.	"Mouse LDH-A gene for lactate dehydrogenase A (exons 1-2)," Accession No. X03753; NCBI Database, 9 April 1993.		
30.	"Mouse LDH-A gene for lactate dehydrogenase-A," Accession No. Y00309 M27554; NCBI Database, 20 November 1997.		
31.	"Mus musculus lactate dehydrogenase 1, A chain (ldh1), mRNA," Accession NO. NM_010699; NCBI Database 7 January 2002.		
32.	NOEL et al., "Engineering of glycerol-stimulated insulin secretion in islet beta cells," <i>The Journal of Biological Chemistry</i> 272 : 30 18621-18627 (1997).		
33.	"Rattus norvegicus lactate dehydrogenase A (Ldha), mRNA," Accession No. NM_017025; NCBI Database, 24 December 2003.		
34.	"Rattus norvegicus lactate dehydrogenase A (Ldha), mRNA," Accession No. NM_017025; NCBI Database, 14 January 2003..		
35.	SCRABLE, et al., "Rhabdomyosarcoma-associated locus and MYOD1 are syntenic but separate loci on the short arm of human chromosome 11," <i>Proc. Natl. Acad. Sci. USA</i> 87 : 2182-2186 (March, 1990).		
36.	ZHAO et al., "Overexpression of lactate dehydrogenase A attenuates glucose-induced insulin secretion in stable MIN-6 β -cell lines," <i>FEBS</i> 430 : 213-216 (1998).		

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